

- 1. An antibody which specifically binds to Apo-2.
- 2. The antibody of claim 1 which is a monoclonal antibody.
- 3. The antibody of claim & which is an agonist antibody.
- 4. The antibody of plaim 1 which is a blocking antibody.
- 5. The antibody of claim 1 which is a chimeric antibody.
- 6. A hybridoma cell line which produces the antibody of claim 2.
- 7. The antibody of claim 2 having the biological characteristics of the monoclonal antibody produced by the hybridoma cell line deposited under American Type Culture Collection Accession Number ATCC HB-12456.
- 8. The antibody of claim 2 wherein the antibody binds to the same epitope as the epitope to which the monoclonal antibody produced by the hybridoma cell line deposited under American Type Culture Collection Accession Number ATCO HB-12456 binds.
- The hybridoma cell line deposited under American Type Culture Collection Accession Number HB-12456.
- 10. The monoclonal antibody produced by the hybridoma cell line deposited under American Type Culture Collection Accession Number ATCC HB-12456.
 - 11. An isolated nucleic acid encoding the Apo-2 antibody of claim 1.
 - 12. A composition comprising the antibody of claim 1 and a carrier.
 - 13. The composition of claim 12 wherein said carrier is a pharmaceutically acceptable carrier.
 - 14. A method of inducing apoptosis in mammalian cells comprising

4

exposing mammalian cells to an effective amount of an Apo-2 agonist antibody.

- 15. An article of manufacture, comprising a container and a composition contained within the container, wherein the composition includes an Apo-2 antibody.
- 16. The article of manufacture of claim 15 further comprising instructions for using the Apo-2 antibody in vivo or in vitro.
- 17. A dimeric molecule comprising an Apo-2 antibody linked to a heterologous immunoglobulin.
- 18. A homodimeric molecule comprising a first Apo-2 antibody and a second Apo-2 antibody.

add Bo add c3